WHAT IS CLAIMED IS:

1. A system for processing data, comprising:

a memory operable to store a plurality of correlithm objects, each correlithm object comprising a plurality of values defining a point in a particular space, the particular space defined by a plurality of dimensions and including a plurality of points; and

a processor operable to generate at least some of the values in at least a portion of the correlithm objects, a distance between a first point associated with one of the correlithm objects and each of the plurality of points in the particular space defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space, a distance between the first point and a second point associated with another of the correlithm objects being substantially larger than the mean of the distribution.

2. The system of Claim 1, wherein:

the memory stores at least one first correlithm object comprising a plurality of first values; and

the processor generates at least one second correlithm object comprising a plurality of second values.

3. The system of Claim 2, wherein the processor generates the second correlithm objects using a random walk and the first correlithm object.

4. The system of Claim 3, wherein the processor generates the second values in one of the second correlithm objects by:

identifying a window of random values for each first value;

selecting a random value from each window of random values; and

combining each random value selected from a window with the first value associated with the window to produce the second values in one of the second correlithm objects.

5. The system of Claim 2, wherein the processor interpolates the second values in the second correlithm objects using the first values in two first correlithm objects.

6. The system of Claim 5, wherein the processor performs a linear interpolation.

7. The system of Claim 6, wherein the processor interpolates the second values in one of the second correlithm objects by:

selecting a fractional value between zero and one;

subtracting each first value in one of the first correlithm objects from the associated first value in the other first correlithm object to produce a plurality of difference values;

multiplying the difference values by the fractional value to produce a plurality of interpolation values; and

adding the interpolation values to the first values in one of the first correlithm objects to produce the second values in one of the second correlithm objects.

8. The system of Claim 1, wherein the processor generates the correlithm objects using a function having a different centering point for each of the correlithm objects.

9. The system of Claim 8, wherein:

each value in one of the correlithm objects is associated with an index value; and

the processor is operable to generate the values in one of the correlithm objects by executing the function using the index values.

10. The system of Claim 8, wherein the function comprises a gaussian function.

11. The system of Claim 10, wherein the centering point of the gaussian function is associated with a maximum value of the gaussian function.

12. The system of Claim 8, wherein:

each correlithm object is associated with an index value; and

the processor is operable to generate the values in one of the correlithm objects by assigning the centering point equal to the index value of the correlithm object.

13. The system of Claim 1, wherein the processor generates the correlithm objects by:

selecting a plurality of second points in a geometric space;

projecting each second point onto a plurality of lines in the geometric space, each line associated with a sequence of values; and

determining the values in the correlithm objects using positions of the projected second points along the lines and the sequences of values associated with the lines.

14. The system of Claim 13, wherein the geometric space comprises a two-dimensional unit square.

15. The system of Claim 13, wherein the processor determines the values in the correlithm objects by:

determining an index value based on the position of the projected second point along one of the lines; and

using the index value to select at least one of the values from the sequence of values associated with the line.

16. The system of Claim 1, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

17. The system of Claim 1, wherein the correlithm objects form at least a portion of a ring correlithm object.

18. The system of Claim 1, wherein the processor is further operable to generate a ring correlithm object using the correlithm objects.

19. The system of Claim 18, wherein the processor is operable to generate the ring correlithm object by shifting at least a portion of the values within the correlithm objects.

20. The system of Claim 1, wherein the distance between the first point and the second point comprises a Cartesian distance.

21. The system of Claim 1, wherein the distance between the first point and the second point is at least two standard deviations larger than the mean of the distribution.

22. The system of Claim 1, wherein the mean of the distribution represents a standard distance relating the first point to one of the points in the particular space.

23. A method for processing data, comprising:

generating a first correlithm object comprising a plurality of first values defining a first point in a particular space, the particular space defined by a plurality of dimensions and including a plurality of points, a distance between the first point and each of the plurality of points defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space; and

generating a second correlithm object comprising a plurality of second values defining a second point in the particular space, a distance between the first point associated with the first correlithm object and the second point associated with the second correlithm object being substantially larger than the mean of the distribution.

24. The method of Claim 23, wherein the first and second correlithm objects are generated using at least one seed correlithm object comprising a plurality of seed values.

25. The method of Claim 24, wherein generating the first and second correlithm objects comprises generating the first and second correlithm objects using a random walk.

26. The method of Claim 25, wherein generating the first correlithm object comprises:

identifying a window of random values for each seed value;

selecting a random value from each window of random values; and

combining each random value selected from a window with the seed value associated with the window to produce the first values.

27. The method of Claim 24, wherein generating the first and second correlithm objects comprises interpolating the first and second values using the seed values in two seed correlithm objects.

28. The method of Claim 27, wherein generating the first and second correlithm objects comprises performing a linear interpolation.

29. The method of Claim 28, wherein generating the first correlithm object comprises:

selecting a fractional value between zero and one;

subtracting each seed value in one of the seed correlithm objects from the associated seed value in the other seed correlithm object to produce a plurality of difference values;

multiplying the difference values by the fractional value to produce a plurality of interpolation values; and

adding the interpolation values to the seed values in one of the seed correlithm objects to produce the first values.

30. The method of Claim 23, wherein generating the first and second correlithm objects comprises generating the first and second correlithm objects using a function having a different centering point for each of the correlithm objects.

31. The method of Claim 30, wherein:

each first value in the first correlithm object is associated with an index value; and

generating the first correlithm objects comprises generating the first values by executing the function using the index values.

32. The method of Claim 30, wherein the function comprises a gaussian function.

33. The method of Claim 23, wherein generating the first and second correlithm objects comprises:

selecting a plurality of second points in a geometric space;

projecting each second point onto a plurality of lines in the geometric space, each line associated with a sequence of values; and

determining the first and second values in the correlithm objects using positions of the projected second points along the lines and the sequences of values associated with the lines.

34. The method of Claim 33, wherein determining one of the first or second values in the correlithm objects comprises:

determining an index value based on the position of one of the projected second points along one of the lines; and

using the index value to select at least one of the values from the sequence of values associated with the line.

35. The method of Claim 23, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

36. The method of Claim 23, further comprising generating a third correlithm object, the third correlithm object comprising a plurality of third values defining a third point in the particular space, a distance between the second point associated with the second correlithm object and the third point associated with the third correlithm object being substantially larger than the mean of the distribution.

37. The method of Claim 36, wherein the correlithm objects form at least a portion of a ring correlithm object.

38. The method of Claim 36, further comprising generating a ring correlithm object using the correlithm objects.

39. The method of Claim 38, wherein generating the ring correlithm object comprises shifting at least a portion of the values within the correlithm objects.

40. The method of Claim 23, wherein the distance between the first point and the second point is at least two standard deviations larger than the mean of the distribution.

41. A system for processing data, comprising:

a memory operable to store a first correlithm object associated with first data, the first correlithm object comprising a plurality of first values;

a processor operable to:

generate at least one additional correlithm object;

distribute at least a portion of the first values from the first correlithm object to the additional correlithm objects; and

for each first value in one of the correlithm objects, perform a random walk using the first value to generate an additional value for each of the remaining correlithm objects; and

the correlithm objects defining first points in a particular space, the particular space defined by a plurality of dimensions and including a plurality of second points, a distance between one of the first points and each of the second points defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space, the correlithm objects forming a ring correlithm object in which a distance between the first points represented by adjacent correlithm objects in the ring correlithm object is substantially different than the mean of the distribution.

42. The system of Claim 41, wherein:

one of the first values is selected as a current value; and

the processor performs the random walk for the first value by:

identifying a window of random values;

selecting a random value from the window of random values; and

combining the random value with the current value to produce an additional value for one of the remaining correlithm objects.

43. The system of Claim 42, wherein performing the random walk for the first value further comprises:

selecting the additional value as the current value; and

repeating the steps to produce another additional value for another of the remaining correlithm objects.

44. The system of Claim 41, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

45. The system of Claim 41, wherein the distance between the first point and a second point associated with one of the additional correlithm objects is substantially smaller than the mean of the distribution for the particular space.

46. The system of Claim 41, wherein the distance between the first point and a second point associated with one of the additional correlithm objects is at least two standard deviations smaller than the mean of the distribution for the particular space.

47. A method for processing data, comprising:

storing a first correlithm object associated with first data, the first correlithm object comprising a plurality of first values;

generating at least one additional correlithm object;

distributing at least a portion of the first values from the first correlithm object to the additional correlithm objects; and

for each first value in one of the correlithm objects, performing a random walk using the first value to generate an additional value for each of the remaining correlithm objects, the correlithm objects defining first points in a particular space, the particular space defined by a plurality of dimensions and including a plurality of second points, a distance between one of the first points and each of the second points defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space, the correlithm objects forming a ring correlithm object in which a distance between the first points represented by adjacent correlithm objects in the ring correlithm object is substantially different than the mean of the distribution.

48. The method of Claim 47, wherein:

one of the first values is selected as a current value; and

performing the random walk for the first value comprises:

identifying a window of random values;

selecting a random value from the window of random values; and

combining the random value with the current value to produce an additional value for one of the remaining correlithm objects.

49. The method of Claim 48, wherein performing the random walk for the first value further comprises:

selecting the generated additional value as the current value; and

repeating the steps to produce another additional value for another of the remaining correlithm objects.

50. The method of Claim 47, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

51. The method of Claim 47, wherein the distance between the first point and a second point associated with one of the additional correlithm objects is substantially smaller than the mean of the distribution for the particular space.

52. The method of Claim 47, wherein the distance between the first point and a second point associated with one of the additional correlithm objects is at least two standard deviations smaller than the mean of the distribution for the particular space.

53. A system for processing data, comprising:

a memory operable to store a first correlithm object associated with first data and a second correlithm object associated with second data, the first correlithm object comprising a plurality of first values defining a first point in a particular space, the second correlithm object comprising a plurality of second values defining a second point in the particular space, the particular space defined by a plurality of dimensions and including a plurality of points, a distance between the first point and each of the plurality of points defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space; and

a processor operable to generate a third correlithm object, the third correlithm object comprising a plurality of third values defining a third point in the particular space, the processor operable to generate the third correlithm object by interpolating the third values using the first and second values, a distance between the first point associated with the first correlithm object and the third point associated with the third correlithm object being substantially different than the mean of the distribution.

54. The system of Claim 53, wherein the processor is operable to generate the third values by performing a linear interpolation using the first and second values.

55. The system of Claim 54, wherein the processor performs a linear interpolation by:

selecting a fractional value between zero and one;

subtracting each first value from the associated second value to produce a plurality of difference values;

multiplying the difference values by the fractional value to produce a plurality of interpolation values; and

adding the interpolation values to the first values to produce the third values.

56. The system of Claim 53, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

57. The system of Claim 53, wherein the processor is further operable to generate a fourth correlithm object, the fourth correlithm object comprising a plurality of fourth values defining a fourth point in the particular space, a distance between the third point associated with the third correlithm object and the fourth point associated with the fourth correlithm object being substantially different than the mean of the distribution.

58. The system of Claim 53, wherein the first, second, and third correlithm objects form at least a portion of a ring correlithm object.

59. The system of Claim 53, wherein the processor is operable to generate a ring correlithm object by shifting at least a portion of the first, second, and third values within the correlithm objects.

60. The system of Claim 53, wherein:

the third correlithm object forms at least a portion of a first half of a ring correlithm object; and

the processor is further operable to generate a fourth correlithm object, the fourth correlithm object forming at least a portion of a second half of the ring correlithm object.

61. The system of Claim 60, wherein the processor is operable to generate the third and fourth correlithm objects by performing nonlinear interpolations using the first and second values.

62. The system of Claim 53, wherein the distance between the first point associated with the first correlithm object and the third point associated with the third correlithm object is substantially smaller than the mean of the distribution.

63. The system of Claim 53, wherein the distance between the first point associated with the first correlithm object and the third point associated with the third correlithm object is at least two standard deviations smaller than the mean of the distribution.

64. A method for processing data, comprising:

storing a first correlithm object associated with first data and a second correlithm object associated with second data, the first correlithm object comprising a plurality of first values defining a first point in a particular space, the second correlithm object comprising a plurality of second values defining a second point in the particular space, the particular space defined by a plurality of dimensions and including a plurality of points, a distance between the first point and each of the plurality of points defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space; and

generating a third correlithm object, the third correlithm object comprising a plurality of third values defining a third point in the particular space, the third values interpolated using the first and second values, a distance between the first point associated with the first correlithm object and the third point associated with the third correlithm object being substantially different than the mean of the distribution.

65. The method of Claim 64, wherein generating the third values comprises performing a linear interpolation using the first and second values.

66. The method of Claim 65, wherein performing a linear interpolation comprises:

selecting a fractional value between zero and one;

subtracting each first value from the associated second value to produce a plurality of difference values;

multiplying the difference values by the fractional value to produce a plurality of interpolation values; and

adding the interpolation values to the first values to produce the third values.

67. The method of Claim 64, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

68. The method of Claim 64, further comprising generating a fourth correlithm object, the fourth correlithm object comprising a plurality of fourth values defining a fourth point in the particular space, the fourth values interpolated using the first and second values, a distance between the third point associated with the third correlithm object and the fourth point associated with the fourth correlithm object being substantially different than the mean of the distribution.

69. The method of Claim 64, wherein the first, second, and third correlithm objects form at least a portion of a ring correlithm object.

70. The method of Claim 64, further comprising generating a ring correlithm object by shifting at least a portion of the first, second, and third values within the correlithm objects.

71. The method of Claim 64, wherein:

the third correlithm object forms at least a portion of a first half of a ring correlithm object; and

further comprising generating a fourth correlithm object, the fourth correlithm object forming at least a portion of a second half of the ring correlithm object.

72. The method of Claim 71, wherein generating the third and fourth correlithm objects comprises performing nonlinear interpolations using the first and second values.

73. The method of Claim 64, wherein the distance between the first point associated with the first correlithm object and the third point associated with the third correlithm object is substantially smaller than the mean of the distribution.

74. The method of Claim 64, wherein the distance between the first point associated with the first correlithm object and the third point associated with the third correlithm object is at least two standard deviations smaller than the mean of the distribution.

75. A system for processing data, comprising:

a memory operable to store a plurality of correlithm objects, each correlithm object comprising a plurality of first values defining a point in a particular space, the particular space defined by a plurality of dimensions and including a plurality of points; and

a processor operable to generate the first values in the correlithm objects using a function having a centering point, the processor operable to associate the centering point with a second value to generate the first values in one of the correlithm objects, a distance between a first point associated with one of the correlithm objects and each of the plurality of points in the particular space defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space, a distance between the first point and a second point associated with another of the correlithm objects being substantially different than the mean of the distribution.

76. The system of Claim 75, wherein:

each first value in one of the correlithm objects is associated with an index value; and

the processor is operable to generate the first values for one of the correlithm objects by executing the function using the index values.

77. The system of Claim 75, wherein the function comprises a gaussian function.

78. The system of Claim 77, wherein the centering point of the gaussian function is associated with a maximum value of the gaussian function.

79. The system of Claim 75, wherein:

each correlithm object is associated with an index value; and

the processor is operable to generate the first values in one of the correlithm objects by associating the centering point of the function with the index value of the correlithm object.

80. The system of Claim 75, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

81. The system of Claim 75, wherein the correlithm objects form a ring correlithm object.

82. The system of Claim 81, wherein the function comprises a sine function.

83. The system of Claim 75, wherein the processor is operable to generate a ring correlithm object by shifting at least a portion of the first values within the correlithm objects.

84. The system of Claim 75, wherein the distance between the first point associated with one of the correlithm objects and the second point associated with another of the correlithm objects is substantially smaller than the mean of the distribution.

85. The system of Claim 75, wherein the distance between the first point associated with one of the correlithm objects and the second point associated with another of the correlithm objects is at least two standard deviations smaller than the mean of the distribution.

86. A method for processing data, comprising:

generating a first correlithm object comprising a plurality of first values defining a first point in a particular space, the particular space defined by a plurality of dimensions and including a plurality of points, the first values generated using a function associated with a first centering point value, a distance between the first point and each of the plurality of points defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space; and

generating a second correlithm object comprising a plurality of second values defining a second point in the particular space, the second values generated using the function associated with a second centering point value, a distance between the first point associated with the first correlithm object and the second point associated with the second correlithm object being substantially different than the mean of the distribution.

87. The method of Claim 86, wherein:

each first value in the first correlithm object is associated with an index value; and

generating the first correlithm object comprises executing the function using the index values.

88. The method of Claim 86, wherein the function comprises a gaussian function.

89. The method of Claim 88, wherein the centering point of the gaussian function is associated with a maximum value of the gaussian function.

90. The method of Claim 86, wherein:

each correlithm object is associated with an index value; and

generating the first values in the first correlithm object comprises associating the first centering point value to the index value of the first correlithm object.

91. The method of Claim 86, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

92. The method of Claim 86, further comprising generating a third correlithm object, the third correlithm object comprising a plurality of third values defining a third point in the particular space, the third values generated using the function associated with a third centering point value, a distance between the second point associated with the second correlithm object and the third point associated with the third correlithm object being substantially different than the mean of the distribution.

93. The method of Claim 92, wherein the correlithm objects form a ring correlithm object.

94. The method of Claim 93, wherein the function comprises a sine function.

95. The method of Claim 92, further comprising generating a ring correlithm object by shifting at least a portion of the first, second, and third values within the correlithm objects.

96. The method of Claim 86, wherein the distance between the first point associated with the first correlithm object and the second point associated with the second correlithm object is substantially smaller than the mean of the distribution.

97. The method of Claim 86, wherein the distance between the first point associated with the first correlithm object and the second point associated with the second correlithm object is at least two standard deviations smaller than the mean of the distribution.

98. A system for processing data, comprising:

a memory operable to store a plurality of correlithm objects, each correlithm object comprising a plurality of first values defining a first point in a particular space, the particular space defined by a plurality of dimensions and including a plurality of points; and

a processor operable to generate the first values in the correlithm objects by:

selecting a plurality of second points in a geometric space;

projecting each second point onto a plurality of lines in the geometric space, each line associated with a sequence of values; and

determining the first values using positions of the projected second points along the lines and the sequences of values associated with the lines; and

wherein a distance between one of the first points associated with one of the correlithm objects and each of the plurality of points in the particular space defines a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space, a distance between one of the first points and another of the first points associated with another of the correlithm objects being substantially different than the mean of the distribution.

99. The system of Claim 98, wherein the geometric space comprises a two-dimensional unit square.

100. The system of Claim 99, wherein the lines have a midpoint within the unit square.

101. The system of Claim 98, wherein projecting the second points onto the lines comprises projecting the second points perpendicularly onto the lines.

102. The system of Claim 98, wherein the processor determines the first values by:

determining an index value based on the position of the projected second point along one of the lines; and

using the index value to select at least one of the values from the sequence of values associated with the line.

103. The system of Claim 102, wherein:

the index value identifies one value from the sequence of values; and

one of the first values comprises the value from the sequence of values.

104. The system of Claim 102, wherein:

the index value is associated with multiple values from the sequence of values; and

the processor is further operable to generate one of the first values by interpolating the first value using the multiple values from the sequence of values.

105. The system of Claim 98, wherein the correlithm objects form at least a portion of a ring correlithm object.

106. The system of Claim 98, wherein:

the geometric space comprises a sphere; and

the lines form great circles around the sphere.

107. The system of Claim 106, wherein the second points lie along an equator of the sphere.

108. The system of Claim 98, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

109. The system of Claim 98, wherein the distance between one of the first points associated with one of the correlithm objects and another of the first points associated with another of the correlithm objects is substantially smaller than the mean of the distribution.

110. The system of Claim 98, wherein the distance between one of the first points associated with one of the correlithm objects and another of the first points associated with another of the correlithm objects is at least two standard deviations smaller than the mean of the distribution.

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111. A method for processing data, comprising:

selecting a plurality of first points in a geometric space;

projecting each first point onto a plurality of lines in the geometric space, each line associated with a sequence of values;

for each first point, determining a plurality of second values using positions of the projected first point along the lines and the sequences of values associated with the lines; and

generating a plurality of correlithm objects using the second values, each correlithm object defining a point in a particular space, the particular space defined by a plurality of dimensions and including a plurality of points, wherein a distance between a second point associated with one of the correlithm objects and each of the plurality of points in the particular space defines a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space, a distance between the second point and a third point associated with another of the correlithm objects being substantially different than the mean of the distribution.

112. The method of Claim 111, wherein the geometric space comprises a two-dimensional unit square.

113. The method of Claim 112, wherein the lines have a midpoint within the unit square.

114. The method of Claim 111, wherein projecting the first points onto the lines comprises projecting the first points perpendicularly onto the lines.

115. The method of Claim 111, wherein determining the second values comprises:

determining an index value based on the position of the projected first point along one of the lines; and

using the index value to select at least one of the values from the sequence of values associated with the line.

116. The method of Claim 115, wherein:

the index value identifies one value from the sequence of values; and

one of the second values comprises the value from the sequence of values.

117. The method of Claim 115, wherein:

the index value is associated with multiple values from the sequence of values; and

further comprising generating one of the second values by interpolating the second value using the multiple values from the sequence of values.

118. The method of Claim 111, wherein the correlithm objects form a ring correlithm object.

119. The method of Claim 111, wherein:

the geometric space comprises a sphere; and

the lines form great circles around the sphere.

120. The method of Claim 119, wherein the first points lie along an equator of the sphere.

121. The method of Claim 111, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

122. The method of Claim 111, wherein the distance between the second point associated with one of the correlithm objects and the third point associated with another of the correlithm objects is substantially smaller than the mean of the distribution.

123. The method of Claim 111, wherein the distance between the second point associated with one of the correlithm objects and the third point associated with another of the correlithm objects is at least two standard deviations smaller than the mean of the distribution.

124. A system for processing data, comprising:

a memory operable to store a plurality of correlithm objects, each correlithm object comprising a plurality of values defining a point in a particular space, the particular space defined by a plurality of dimensions and including a plurality of points, wherein a distance between a first point associated with one of the correlithm objects and each of the plurality of points in the particular space defines a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space; and

a processor operable to generate at least some of the values in at least a portion of the correlithm objects, the correlithm objects forming a ring correlithm object in which a distance between the points represented by adjacent correlithm objects in the ring correlithm object is substantially different than the mean of the distribution.

125. The system of Claim 124, wherein:

the memory stores at least one seed correlithm object; and

the processor generates at least some of the values in at least a portion of the remaining correlithm objects.

126. The system of Claim 125, wherein the processor generates at least some of the values in the remaining correlithm objects using a random walk and one seed correlithm object.

127. The system of Claim 125, wherein the processor interpolates at least some of the values in the remaining correlithm objects using two seed correlithm objects.

128. The system of Claim 124, wherein the processor generates at least some of the values in the correlithm objects using a function having a different centering point for each of the correlithm objects.

129. The system of Claim 124, wherein the processor generates at least some of the values in the correlithm objects by:

selecting a plurality of second points in a geometric space;

projecting each second point onto a plurality of lines in the geometric space, each line associated with a sequence of values; and

determining the first values using positions of the projected second points along the lines and the sequences of values associated with the lines.

130. The system of Claim 124, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

131. The system of Claim 124, wherein the distance between the first point associated with one of the correlithm objects and a second point associated with another of the correlithm objects is substantially smaller than the mean of the distribution.

132. The system of Claim 124, wherein the distance between the first point associated with one of the correlithm objects and a second point associated with another of the correlithm objects is at least two standard deviations smaller than the mean of the distribution.

133. A method for processing data, comprising:

generating a first correlithm object comprising a plurality of first values defining a first point in a particular space, the particular space defined by a plurality of dimensions and including a plurality of points, a distance between the first point and each of the plurality of points defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space;

generating a second correlithm object comprising a plurality of second values defining a second point in the particular space; and

generating a third correlithm object comprising a plurality of third values defining a third point in the particular space, the correlithm objects forming at least a portion of a ring correlithm object in which a distance between the points represented by adjacent correlithm objects in the ring correlithm object is substantially different than the mean of the distribution.

134. The method of Claim 133, wherein generating the correlithm objects comprises generating the correlithm objects using at least one seed correlithm object.

135. The method of Claim 134, wherein generating the correlithm objects comprises generating the correlithm objects using a random walk and one seed correlithm object.

136. The method of Claim 134, wherein generating the correlithm objects comprises interpolating the values in the correlithm objects using two seed correlithm objects.

137. The method of Claim 133, wherein generating the correlithm objects comprises generating the correlithm objects using a function having a different centering point for each of the correlithm objects.

138. The method of Claim 133, wherein generating the correlithm objects comprises:

selecting a plurality of second points in a geometric space;

projecting each second point onto a plurality of lines in the geometric space, each line associated with a sequence of values; and

determining the first values using positions of the projected second points along the lines and the sequences of values associated with the lines.

139. The method of Claim 133, wherein the mean is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

140. The method of Claim 133, wherein the distance between the first point and the second point is substantially smaller than the mean of the distribution.

141. The method of Claim 133, wherein the distance between the first point and the second point is at least two standard deviations smaller than the mean of the distribution.

142. A system for processing data, comprising:

a memory operable to store a plurality of multi-dimensional correlithm objects comprising a plurality of correlithm objects, each correlithm object comprising a plurality of values defining a first point in a particular space that is defined by a plurality of dimensions and includes a plurality of points, a distance in each particular space between the first point and each of the plurality of points defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space; and

a processor operable to generate at least some of the values in at least a portion of the multi-dimensional correlithm objects, a distance between one of the first points and another of the first points in each particular space being substantially different than the mean of the distribution for that particular space.

143. The system of Claim 142, wherein each correlithm object in one of the multi-dimensional correlithm objects resides in a different particular space.

144. The system of Claim 142, wherein the processor generates at least some of the values in the multi-dimensional correlithm objects using a random walk and one seed multi-dimensional correlithm object.

145. The system of Claim 142, wherein the processor generates at least some of the values in the multi-dimensional correlithm objects by interpolating the values in the multi-dimensional correlithm objects using two seed multi-dimensional correlithm objects.

146. The system of Claim 142, wherein the processor generates at least some of the values in the multi-dimensional correlithm objects using a function having a different centering point for each of the multi-dimensional correlithm objects.

147. The system of Claim 142, wherein the processor generates at least some of the values in the multi-dimensional correlithm objects by:

selecting a plurality of second points in a geometric space;

projecting each second point onto a plurality of lines in the geometric space, each line associated with a sequence of values; and

determining the values in the correlithm objects using positions of the projected second points along the lines and the sequences of values associated with the lines.

148. The system of Claim 142, wherein the mean for each particular space is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

149. The system of Claim 142, wherein the multi-dimensional correlithm objects form at least a portion of a ring multi-dimensional correlithm object.

150. The system of Claim 142, wherein the processor is further operable to generate a ring multi-dimensional correlithm object using the multi-dimensional correlithm objects.

151. The system of Claim 150, wherein the processor is operable to generate the ring multi-dimensional correlithm object by shifting at least a portion of the values within the multi-dimensional correlithm objects.

152. The system of Claim 142, wherein the distance between one of the first points and another of the first points in each particular space is substantially smaller than the mean of the distribution for each particular space.

153. The system of Claim 142, wherein the distance between one of the first points and another of the first points in each particular space is at least two standard deviations smaller than the mean of the distribution for each particular space.

154. A method for processing data, comprising:

generating a first multi-dimensional correlithm object associated with first data, the first multi-dimensional correlithm object comprising a plurality of first correlithm objects, each first correlithm object comprising a plurality of first values defining a first point in a particular space that is defined by a plurality of dimensions and includes a plurality of points, a distance in each particular space between the first point and each of the plurality of points defining a distribution having a mean and a standard deviation such that a ratio of the mean to the standard deviation increases with the number of dimensions of the particular space; and

generating a second multi-dimensional correlithm object, the second multi-dimensional correlithm object comprising a plurality of second correlithm objects, each second correlithm object comprising a plurality of second values defining a second point in a particular space, a distance between the first point and the second point in each particular space being substantially different than the mean of the distribution for each particular space.

155. The method of Claim 154, wherein each correlithm object in one of the multi-dimensional correlithm objects resides in a different particular space.

156. The method of Claim 154, wherein generating the multi-dimensional correlithm objects comprises generating the multi-dimensional correlithm objects using a random walk and one seed multi-dimensional correlithm object.

157. The method of Claim 154, wherein generating the multi-dimensional correlithm objects comprises interpolating the values in the multi-dimensional correlithm objects using two seed multi-dimensional correlithm objects.

158. The method of Claim 154, wherein generating the multi-dimensional correlithm objects comprises generating the multi-dimensional correlithm objects using a function having a different centering point for each of the multi-dimensional correlithm objects.

159. The method of Claim 154, wherein generating the multi-dimensional correlithm objects comprises:

selecting a plurality of second points in a geometric space;

projecting each second point onto a plurality of lines in the geometric space, each line associated with a sequence of values; and

determining the first values using positions of the projected point along the lines and the sequences of values associated with the lines.

160. The method of Claim 154, wherein the mean for each particular space is approximately $\sqrt{\frac{N}{6}}$, where N equals the number of dimensions in the particular space, and the standard deviation approaches 0.24 as N increases.

161. The method of Claim 154, further comprising generating a third multi-dimensional correlithm object, the third multi-dimensional correlithm object comprising a plurality of third correlithm objects, each third correlithm object comprising a plurality of third values defining a third point in a particular space, a distance between the second point and the third point in each particular space being substantially different than the mean of the distribution for each particular space.

162. The method of Claim 161, wherein the first, second, and third multi-dimensional correlithm objects form at least a portion of a ring multi-dimensional correlithm object.

163. The method of Claim 161, further comprising generating a ring correlithm object by shifting at least a portion of the first, second, and third values within the multi-dimensional correlithm objects.

164. The method of Claim 154, wherein the distance between the first point and the second point in each particular space is substantially smaller than the mean of the distribution for each particular space.

165. The method of Claim 154, wherein the distance between the first point and the second point in each particular space is at least two standard deviations smaller than the mean of the distribution for each particular space.

166. A system for processing data, comprising:

a memory operable to store a plurality of string correlithm objects, each string correlithm object associated with an axis in a geometric space and comprising at least two correlithm objects; and

a processor operable to generate at least one multi-dimensional correlithm object by:

selecting a point in the geometric space;

identifying the correlithm object in each string correlithm object associated with the point in the geometric space; and

combining the correlithm objects.

167. The system of Claim 166, wherein the axes comprise orthogonal axes in the geometric space.

168. The system of Claim 167, wherein the processor is operable to generate the string correlithm objects associated with the axes.

169. The system of Claim 168, wherein the processor is operable to generate at least one of the string correlithm objects using a random walk and one seed correlithm object.

170. The system of Claim 168, wherein the processor is operable to generate at least one of the string correlithm objects by interpolating the values in the correlithm objects in the string correlithm object using two seed correlithm objects.

171. The system of Claim 167, wherein the processor is operable to generate at least one of the string correlithm objects by generating the correlithm objects in the string correlithm object using a function having a different centering point for each of the correlithm objects.

172. The system of Claim 167, wherein the processor is operable to generate at least one of the string correlithm objects by:

selecting a plurality of second points in a second geometric space;

projecting each second point onto a plurality of lines in the second geometric space, each line associated with a sequence of values; and

determining values in the correlithm objects using positions of the projected second points along the lines and the sequences of values associated with the lines.

173. The system of Claim 166, wherein the processor is operable to generate a plurality of multi-dimensional correlithm objects.

174. The system of Claim 166, wherein at least one of the string correlithm objects comprises a ring correlithm object.

175. The system of Claim 174, wherein the multi-dimensional correlithm objects form at least a portion of a multi-dimensional ring correlithm object.

176. A method for processing data, comprising:

selecting a point in a geometric space, the geometric space associated with a plurality of axes, the axes associated with a plurality of string correlithm objects comprising at least two correlithm objects;

identifying the correlithm object in each string correlithm object associated with the point in the geometric space; and

combining the correlithm objects to produce a multi-dimensional correlithm object.

177. The method of Claim 176, wherein the axes comprise orthogonal axes in the geometric space.

178. The method of Claim 177, further comprising generating the string correlithm objects associated with the axes.

179. The method of Claim 178, wherein generating the string correlithm objects comprises generating at least one of the string correlithm objects using a random walk and one seed correlithm object.

180. The method of Claim 178, wherein generating the string correlithm objects comprises generating at least one of the string correlithm objects by interpolating the values in the correlithm objects in the string correlithm object using two seed correlithm objects.

181. The method of Claim 177, wherein generating the string correlithm objects comprises generating the correlithm objects in at least one of the string correlithm objects using a function having a different centering point for each of the correlithm objects.

182. The method of Claim 177, wherein generating the string correlithm objects comprises generating at least one of the string correlithm objects by:

selecting a plurality of second points in a second geometric space;

projecting each second point onto a plurality of lines in the second geometric space, each line associated with a sequence of values; and

determining values in the correlithm objects using positions of the projected second points along the lines and the sequences of values associated with the lines.

183. The method of Claim 176, further comprising generating a plurality of multi-dimensional correlithm objects.

184. The method of Claim 176, wherein at least one of the string correlithm objects comprises a ring correlithm object.

185. The method of Claim 184, wherein the multi-dimensional correlithm objects form at least a portion of a multi-dimensional ring correlithm object.